

**NAVY PUBLIC WORKS CENTER  
DETACHMENT PHILADELPHIA**

**STANDARD OPERATING PROCEDURE**

**Temporary Lighting and Power on Construction Sites**

**PROCEDURE NUMBER 500. 41**

**DISCLAIMER:** These Standard Operating Procedures (SOP) are for the exclusive use of NAVY PUBLIC WORKS CENTER (PWC) NORFOLK DETACHMENT PHILADELPHIA. They are promulgated as guidance for other NAVFAC COMMANDS. If intended to be used by other Activities, they must be tailored to each Activities particular requirement and must be reviewed/approved by the activities Safety Professionals prior to use.

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***Prepared By:*** \_\_\_\_\_ ***(Date)***

***Approved By***  
***Code/ 030*** \_\_\_\_\_ ***(Date)***

***Safety Professional:*** \_\_\_\_\_ ***(Date)***

***Department Head:*** \_\_\_\_\_ ***(Date)***

***Officer in Charge*** \_\_\_\_\_ ***(Date)***

**Standard Operating Procedure  
500.41**

**TEMPORARY LIGHTING AND POWER  
ON CONSTRUCTION SITES**

**References:** (a) CFR1910  
(b) 2002 NEC  
(c) Code 500 SOP #1  
(d) PWC Energy Control Program Manuel

**PURPOSE:** To establish procedures for PWC NORFOLK DETACHMENT PHILADELPHIA Code 500 employees in the proper use of temporary lighting and power on all construction sites. These procedures must be followed in order to provide a safe work place for all employees.

**GENERAL:** Temporary wiring and lighting is an important part of the construction process. The following standards must be followed. Extension cords are also an important tool on the construction site. All cords must be kept clear of possible psychical hazards, must be protected by GFCI and can not have any repairs or splices.

**A) LIGHTING**

1. All branch circuits shall originate in an approved power panelboard.
2. Covers to all panelboards must be installed.
3. All circuits must enter panel through an approved means.
4. Voltage to ground must not exceed 130V to ground.
5. Wiring to circuits must be installed on the work site so it will not be subject to physical damage.
6. Wiring must be supported in intervals of not more than ten feet.
7. Wiring must be installed of heights not less than eight feet and not more than ten feet.
8. Wiring shall be arranged so that excessive strain is not transmitted to the lamp holder.
9. All lamps must be protected from accidental contact or breakage by using a suitable and approved fixture with a lamp guard.
10. Lighting circuits can not be installed on the same branch circuits as power receptacles.

**B) Power Receptacles:**

- 1. All branch circuits shall originate in an approved panelboard.**
- 2. Covers to panelboards must be installed to prevent accidental contact.**
- 3. Circuits must enter panel through an approved means.**
- 4. All receptacles shall be of the grounding type.**
- 5. All receptacles shall contain to equipment grounding conductor.**
- 6. Receptacles shall not be installed on branch circuits that supply temporary lighting.**
- 7. Any power tools, equipment, etc. Which are plugged into receptacles that are in use by PWC personnel in any construction, repairs, servicing or maintenance purposes must be protected by Ground Fault Circuit Interrupter.**
- 8. All extension cords must be plugged into or protected by a Ground Fault Circuit Interrupter.**
- 9. Extension cords shall not have any splices or repairs and must be discarded.**
- 10. Type NM and NMC cable can be used if installed in a manner where it has no means to physical damage. Supported to studs, joists or similar supports closely following to the buildings finish. And, must adhere to the above references.**

**C) TESTING:**

- 1. The following tests shall be preformed on all cord sets, receptacles that are not part of the permanent wiring of the bldg. Or structure and cord and plug connected equipment required to be grounded.**
- 2. All equipment-grounding conductors shall be tested for continuity and shall be electrically continuos.**
- 3. Each receptacles and attachment plug shall be tested for correct attachment of the equipment-grounding conductor. The equipment-grounding conductor shall be connected to its proper terminal.**
- 4. All required tests shall be preformed as follows.**
  - a. Before first use on site**
  - b. Where it is evidence on damage**
  - c. Before equipment is returned for service**
  - d. All intervals not exceeding three months**
  - e. All tests recorded by authorities.**